

Present Claims

1. (Currently Amended) A system for displaying three-dimensional imagery, the system comprising:

an image source;

a first projector connected to said image source;

said first projector having a first light emission;

a second projector connected to said image source;

said second projector having a second light emission; and

a first twisted nematic liquid crystal rotator disposed in said first light emission;

and

a second twisted nematic liquid crystal rotator disposed in said second light

emission,

wherein the polarization angles of light emitted from each of said twisted nematic liquid crystal rotators are orthogonal to each other.

2. (Canceled)

3. (Canceled)

4. (Canceled)

5. (Canceled)

6. (Canceled)

7. (Original) The system of claim 1 wherein:

said first projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a first red light source, a first green light source and a first blue light source; and

said second projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a second red light source, a second green light source and a second blue light source.

8. (Original) The system of claim 7 further including a second twisted nematic liquid crystal rotator disposed in said second light emission.

9. (Original) The system of claim 8 wherein:

said first twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $45^{\circ}$  twisted nematic liquid crystal rotator; and

said second twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $-45^{\circ}$  twisted nematic liquid crystal rotator.

10. (Original) The system of claim 9 wherein:

said first twisted nematic liquid crystal rotator is disposed in said first light emission externally to said first projector; and

said second twisted nematic liquid crystal rotator is disposed in said second light emission externally to said second projector.

11. (Canceled)

12. (Canceled)

13. (Canceled)

14. (Canceled)

15. (Canceled)

16. (Canceled)

17. (Original) The system of claim 1 wherein:

said first projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a first red light source and a first blue light source and orthogonally polarizes light emitted from a first green light source with respect to said light emitted from said first red light source and said first blue light source; and

said second projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a second red light source and a second

blue light source and orthogonally polarizes light emitted from a second green light source with respect to said light emitted from said second red light source and said second blue light source; and

the green channel of a first image source is interchanged with the green channel of a second image source.

18. (Original) The system of claim 17 further including a second twisted nematic liquid crystal rotator disposed in said second light emission.

19. (Original) The system of claim 18 wherein:

said first twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $45^{\circ}$  twisted nematic liquid crystal rotator; and

said second twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $-45^{\circ}$  twisted nematic liquid crystal rotator.

20. (Original) The system of claim 19 wherein:

said first twisted nematic liquid crystal rotator is disposed in said first light emission externally to said first projector; and

said second twisted nematic liquid crystal rotator is disposed in said second light emission externally to said second projector.

21. (Original) A system for displaying three-dimensional imagery, the system comprising:

an image source;

a first polysilicon thin film transistor liquid crystal display projector connected to said image source wherein said first projector linearly polarizes light emitted from a first red light source and a first blue light source and orthogonally polarizes light emitted from a first green light source with respect to said light emitted from said first red light source and said first blue light source;

said first projector having a first light emission;

a second polysilicon thin film transistor liquid crystal display projector connected to said image source wherein said second projector polarizes light emitted from a second red light source and a second blue light source and orthogonally polarizes light emitted from said second red light source and said second blue light source;

said second projector having a second light emission;

the green channel of a first image source is interchanged with the green channel of a second image source;

a first  $\frac{1}{2}$  wave retarder disposed in said first light emission; and

a second  $\frac{1}{2}$  wave retarder disposed in said second light emission.

22. (Original) The system of claim 21 wherein:

said first  $\frac{1}{2}$  wave retarder is oriented  $-22.5^\circ$  with respect to the orientation angle of said first red light source and said first blue light source; and

said second  $\frac{1}{2}$  wave retarder is oriented at  $+22.5^\circ$  with respect to the orientation angle of said second red light source and said second blue light source.

23. (Original) The system of claim 21 wherein:

said first  $\frac{1}{2}$  wave retarder is disposed in said first light emission externally to said first projector; and

said second  $\frac{1}{2}$  wave retarder is disposed in said second light emission externally to said second projector.

24. (Canceled) A method for displaying three-dimensional imagery using a projection system having a first projector and a second projector using a first twisted nematic liquid crystal rotator, the method comprising:

determining a polarization angle of light emitted from said first projector;

determining a polarization angle of light emitted from said second projector;

altering said polarization angle of light emitted from said first projector to be orthogonal to said polarization angle of light emitted from said second projector; and

wherein said altering said polarization angle of light emitted from said first projector comprises using said first twisted nematic liquid crystal rotator.

25. (Canceled)

26. (Canceled)

27. (Canceled)

28. (Canceled)

29. (Canceled)

30. (Canceled)

31. (Canceled)

32. (Canceled)

33. (Canceled)

34. (Canceled)

35. (Canceled)

36. (Canceled)

37. (Canceled)

38. (Canceled)

39. (Canceled)

40. (Canceled)

41. (Canceled)

42. (Canceled)

43. (Canceled)

44. (Canceled)

45. (Canceled)

46. (Canceled)

47. (New) A system for displaying three-dimensional imagery, the system comprising:

an image source;

a first projector connected to said image source;

said first projector having a first light emission;

a second projector connected to said image source;

said second projector having a second light emission; and

a first twisted nematic liquid crystal rotator disposed in said first light emission,



wherein said first projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a first red light source and a first blue light source and orthogonally polarizes light emitted from a first green light source with respect to said light emitted from said first red light source and said first blue light source; and

said second projector is a polysilicon thin film transistor liquid crystal display projector that linearly polarizes light emitted from a second red light source and a second blue light source and orthogonally polarizes light emitted from a second green light source with respect to said light emitted from said second red light source and said second blue light source; and

the green channel of a first image source is interchanged with the green channel of a second image source.

48. (New) The system of claim 47 further including a second twisted nematic liquid crystal rotator disposed in said second light emission.

49. (New) The system of claim 48 wherein:

said first twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $45^{\circ}$  twisted nematic liquid crystal rotator; and

said second twisted nematic liquid crystal rotator is a  $0^{\circ}$  to  $-45^{\circ}$  twisted nematic liquid crystal rotator.

50. (New) The system of claim 49 wherein:

said first twisted nematic liquid crystal rotator is disposed in said first light emission externally to said first projector; and

said second twisted nematic liquid crystal rotator is disposed in said second light emission externally to said second projector.